Required Supplementary Information

Condition Assessments and Preservation of Infrastructure Eligible for Modified Approach

Roads

The County performs condition assessments on its network of roads through the King County Pavement Management System. This system generates a Pavement Condition Index (PCI) for each segment of arterial and local access road in the network. The PCI is a numerical index from zero to one hundred (0–100) that represents the pavement's functional condition based on the quantity, severity, and type of visual distress, such as pavement cracking. Based on the PCI score, condition ratings are assigned as follows: a PCI of less than 30 is defined as "poor to substandard" (heavy pavement cracking and potholes); a PCI of 30 or more but less than 50 is defined to be in "fair" condition (noticeable cracks and/or utility cuts); and a PCI of between 50 and higher is defined to be in "excellent to good" condition (relatively smooth roadway). Condition assessments are undertaken every three years.

The most recent condition assessments of the County's roads are shown below.

	2010-2008		2007-2005		2004-2002	
Condition ratings	**(miles)**	**%**	**(miles)**	**%**	**(miles)**	**%**
Arterial roads						
Excellent to good	348.2	71.8	485.4	89.6	442.9	81.7
Fair	20.3	4.2	14.5	2.7	61.1	11.3
Poor to substandard	116.7	24.0	41.6	7.7	38.0	7.0
Total	485.2	100.0	541.5	100.0	542.0	100.0
Local access roads						
Excellent to good	867.0	75.6	1,094.5	83.4	1,075.4	81.6
Fair	74.2	6.5	127.3	9.7	139.0	10.6
Poor to substandard	205.8	17.9	91.2	6.9	102.9	7.8
Total	1,147.0	100.0	1,313.0	100.0	1,317.3	100.0

The following table (derived from the table of condition ratings) shows the number and percentage of miles of roads that meet the 40 PCI level.

	2010-2008		2007-2005		2004-2002	
PCI score interval	**(miles)**	**%**	**(miles)**	**%**	**(miles)**	**%**
Arterial roads						
PCI 40 - 100	360.0	74.2	493.4	91.1	475.6	87.7
PCI 0 - 39	125.3	25.8	48.1	8.9	66.4	12.3
Total	485.3	100.0	541.5	100.0	542.0	100.0
Local access roads						
PCI 40 - 100	900.0	78.5	1,170.3	89.1	1,165.6	88.5
PCI 0 - 39	247.0	21.5	142.7	10.9	151.7	11.5
Total	1,147.0	100.0	1,313.0	100.0	1,317.3	100.0

It is the policy of the King County Roads Services Division to maintain at least 80 percent of the road system at a PCI of 40 or better. The 2010 Condition Assessment indicates the arterial and local access road networks have fallen below the 80/40 threshold for Modified Approach. The accelerated condition deterioration observed between the 2009 and 2010 reports are primarily the result of weather and system age. The extreme ranges of weather experienced between 2007 and 2011 have resulted in a higher than normal amount of asphalt cracking caused by the freezing and thawing of a rain-saturated road base. Many of the arterial roadways are beyond their cost effective life cycles, resulting in roadway deterioration earlier than what was estimated or budgeted.

The County Roads Division's current budget conditions do not allow for additional funds to increase the number of miles overlaid, thereby increasing PCI scores. Bringing road system scores into compliance with GASB Modified Method Roads will reduce the number of Hot Mix Asphalt (HMA) miles resurfaced and increase the number of miles resurfaced with Bituminous Surface Treatment (Chip Seal) at a lower unit cost and reduced life cycle. Roads will also investigate a short section paving program that will only resurface road segments with PCI less than 40. While this methodology is not cost effective, it will most immediately correct the PCI deficiencies.

Below is information on planned (budgeted) and actual expenditures incurred to maintain and preserve the road network at or above the minimum acceptable condition level from 2006 to 2010. The budgeted amount is equivalent to the anticipated amount needed to maintain roads up to the required condition level (in thousands).

	2010	2009	2008	2007	2006
Budgeted	$78,843	$64,660	$69,345	$61,864	$58,709
Expended	52,967	58,488	57,367	51,549	49,029

amounts for 2007-2009 restated

Underspending of budgeted amounts usually results when roads are removed from the project list because of conflicts with anticipated utility work; lowering of priority due to cost efficiency considerations, such as when only a few roads are to be resurfaced in remote locations; and weather-related work reduction or stoppages.

Bridges

King County currently maintains 180 bridges. Physical inspections to determine the condition of bridges and the degree of wear and deterioration are carried out at least every two years. Inspections reveal deficiencies in bridges such as steel corrosion, damaged guardrails, rotted timbers, deteriorated bridge decks, bank erosion, and cracked concrete. These are documented in an inspection report along with recommended repairs. Four pedestrian bridges are included in the list of bridges being maintained by the County. These are also subject to condition assessments, but are subject to different standards than the more heavily used vehicular bridges.

Each year the County undergoes a bridge prioritization process to determine potential candidates for replacement or rehabilitation. A weighted 10-point priority scale (sufficiency rating, seismic rating, geometrics, hydraulics, load limits, traffic safety, serviceability, importance, useful life, and structural concern) ranks the bridges in order; the results are considered in the planning and programming of major bridge studies and construction projects in the Roads Capital Improvement Program.

A key element in the priority score is the sufficiency rating, the measure considered by state and federal governments as the basis for establishing eligibility and priority for bridge replacement or rehabilitation funding. The sufficiency rating is a numerical rating of a bridge based on its structural adequacy and safety, essentiality for public use, and its serviceability and functional obsolescence. The formula used to calculate the sufficiency rating for a particular bridge is dictated by the Federal Highway Administration. The sufficiency rating may vary from 100 (a bridge in new condition) to 0 (a bridge incapable of carrying traffic). A sufficiency rating of 50 or over indicates a bridge with a good deal of service life remaining. A bridge that scores between 0 and 49 could be considered for replacement or rehabilitation funding, though typically only bridges that score less than 30 are selected for funding.

The three most recent bridge sufficiency ratings:

Bridge Sufficiency Rating	Number of Bridges 2010	2009	2008
0 - 20	6	8	8
21 - 30	1	2	2
31 - 49	13	12	14
50 - 100	160	160	159
Totals	180	182	183

It is the policy of the King County Road Services Division to maintain bridges in such a manner that no more than 12 will have a sufficiency rating of 20 or less. A rating of 20 or less is usually indicative of a bridge with a structural deficiency. The most common remedy is full replacement or rehabilitation of the bridge.

Amounts budgeted and spent to maintain and preserve bridges (in thousands):

	2010	2009	2008	2007	2006
Budgeted	$19,866	$13,465	$18,855	$24,834	$17,024
Expended	9,760	10,625	11,761	16,189	11,526

amounts for 2007-2009 restated

The budgeted amount is equivalent to the anticipated amount needed to maintain and preserve the bridges up to the required condition level. Backlogs in maintenance work orders greatly affect the trend in maintenance costs. Factors contributing to these backlogs include increased bridge traffic, higher weight loads, labor shortages, stringent environmental restrictions, and an aging inventory.

Postemployment Health Care Plan

Schedule of Funding Progress for the Plan
(in thousands)

Year	Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Unit Credit (b)	Unfunded AAL (UAAL) (b – a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b – a) ÷ c)
2008	12/31/2008	$ -	$ 145,393	$ 145,393	0.0%	$ 890,310	16.3%
2009	12/31/2009	$ -	$ 149,390	$ 149,390	0.0%	$ 947,530	15.8%
2010	12/31/2009	$ -	$ 149,390	$ 149,390	0.0%	$ 969,082	15.4%